ABSTRACT OF THE DISCLOSURE

A rotor-locking mechanism for a vane-type camshaft phaser. A locking pin is disposed in the rotor and is permitted to travel into a well in either the rear cover or the front cover of the phaser. The pin is urged into the well by a return spring, and the end of the pin end is exposed to oil pressure for unlocking the pin. A first channel is provided between the advance-oil feed and the end of the pin, and a second channel is provided between the retard-oil feed and the end of the pin. The channels may be formed in either of the covers. The pin is unlocked whenever a predetermined oil pressure is exceeded in either the advance or retard oil feeds, permitting the pin to be unlocked through most modes of engine operation and to be locked only under specific predetermined low-pressure conditions, such as during engine starting.